

ABSTRACT

Provided is a projection type liquid crystal display apparatus, which can improve black-level display and thus can display a higher-contrast image as compared to the related art. An optical compensator is located on the light exit side with respect to the liquid crystal display device so as to compensate for the optical phase difference caused by liquid crystal molecules in a light-entry-side region of the liquid crystal layer. As the optical compensator is located on the light exit side with respect to the liquid crystal display device, birefringence, caused by the liquid crystal molecules present in the light-entry-side region, is compensated for without being influenced by a microlenses provided in the liquid crystal plane. Consequently, the apparatus can improve the black-level display and thus can display a higher-contrast image as compared to the related art. Further, a phase difference caused by the birefringence of the nematic liquid crystal molecule is compensated for by using a substance having properties optically opposite to the positive crystal, namely, a substance having birefringence equivalent to birefringence of a negative crystal.

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